- 1 states out west. And I think everyone, all the
- 2 staffers there, and I'm quite sure all of the
- 3 members of Congress and all of the senators, thought
- 4 that's what universal service in the '96 act was
- 5 about.
- 6 Let me just give you a few numbers to
- 7 describe what has happened to universal service
- 8 since the passage of the act. There's been
- 9 substantial increases in low income programs. And
- 10 I'm going to use Wyoming as just a case study. You
- 11 might say, well, Wyoming is not a very heavily
- 12 populated state. It has about 0.2 percent of people
- in the United States. It has -- it's one of 50
- 14 states. Perhaps 2 percent is a better number. It's
- perhaps 4 or 5 percent of the land mass of the U.S.
- 16 You can pick a range of reasonable numbers of what
- 17 Wyoming might expect to get out of universal service
- 18 that might help the demand aggregation. So you
- 19 might expect, say, something between 0.2 and 4 or 5
- 20 percent might be reasonable ranges.
- Well, let me describe what Wyoming actually
- 22 gets. For low income programs, it gets 0.0003
- 23 percent of low income universal service programs.
- 24 For rural health care, it gets 0.06 percent. For
- 25 schools and libraries, it gets 0.1 percent. For new

- 1 large company support, I don't know what percentage
- 2 it gets, but I suspect the folks at US West would
- 3 say it ain't enough. Now, something happened in the
- 4 past five years, or something certainly happened in
- 5 the past four years since the passage of the act.
- 6 I'm glad to hear that there are things going on in
- 7 Wyoming and out west to deal with the deployment of
- 8 advanced services, but I'm not surprised that those
- 9 solutions have not been based on federal universal
- 10 service programs or on new federal universal service
- 11 programs.
- 12 And I guess my question to you all is,
- 13 what -- what can we do -- these federal universal
- 14 service programs are growing. They've more than
- 15 tripled in size since the '96 act, although little
- 16 of the money is winding up in Wyoming. Let me note,
- 17 for those of you in the surrounding states, I have
- 18 the same numbers for every state out west. There's
- 19 the exact same result. Every large square or
- 20 roughly square state has done very badly out of the
- 21 universal service program. South Dakota, Montana,
- 22 North Dakota, Nebraska, Kansas, Colorado, Utah,
- 23 Idaho. You name it. Same result. What can we do
- 24 to get this program back targeted to what Congress
- 25 thought it ought to be?

1	COMMISSIONER NELSON: I have a
2	suggestion. Does that surprise you?
3	Well, first my suggestion might be that we
4	evaluate what we spend our money on. And I think
5	that we ought to be investing in long-term things
6	that will pay off over the long haul. In other
7	words, if we can for instance, one program that
8	would come to mind is the president's idea of
9	handing out telephone service on the reservations
10	for a dollar. Now, I think that might be an
11	admirable program, but if we have limited resources,
12	I personally believe that we might be investing in
13	our infrastructure. So I think that that would be a
14	better long-term investment than giving somebody a
15	buck worth of phone service. So I think that we
16	have lots of programs out there, but we have to make
17	a decision about which are the most valuable. And I
18	think, in the long-run, we need to be sending the
19	rewards to those people who invest in the
20	infrastructure.
21	And as for the health rural health
2 2	programs and telemedicine programs and things, it's
23	true that they didn't get universal service funding,
24	but they certainly got a federal subsidy. If those
25	rural health care dollars with the schools and

- 1 libraries things weren't available, the application
- of those telemedicine things wouldn't be happening,
- 3 at least in South Dakota. And I'm not sure about
- 4 Wyoming. So maybe it's not universal service.
- 5 There are all sorts of ways that the federal
- 6 government supports worthy programs. But I think
- 7 that the rural health care money, for a large part,
- 8 came along -- the new money, anyway, came along
- 9 because of the 1996 act and the schools and
- 10 libraries and all those kinds of things. So it
- 11 wasn't universal service, but it was -- certainly
- 12 came about because of the 1996 act, in my opinion,
- and certainly is another way that we've subsidized
- 14 other than through universal service.
- 15 COMMISSIONER FURTNEY: Governor?
- 16 GOVERNOR GERINGER: Commissioner
- 17 Furchtgott-Roth, let me follow up a little bit on
- 18 what was just said. And that is we need to know
- 19 what we're going to do before we say we need the
- 20 money. If all we do is have a giveaway, we promote
- 21 dependency. And what we are most interested in in
- 22 the west is how we can create the ability to move
- 23 forward on our terms and on our ability.
- 24 Having said that, there is certainly a
- 25 disproportion of unfairness when it comes to the

- 1 allocation of those funds to the western states. A
- 2 lot of it has to do with the very model being used
- 3 by FCC. So I'll reinforce to you what I said to
- 4 Chairman Kennard a while back. Change the model and
- 5 change the model to where you have the flexibility
- 6 allowed for the uniqueness of these states and how
- 7 it's allocated.
- But we ought to be working together to meet
- 9 the intent of Congress and, of course, the need of
- 10 the people out here. So part of, I quess, what
- 11 needs to be done is governors and other policymakers
- 12 work with our congressional delegations to make sure
- 13 that the message is getting through to them that
- 14 their intent is not being met, that we reinforce
- 15 your willingness to work with us, with your fellow
- 16 commissioners at the FCC, and make them just as
- 17 aware as you are that the dollars are not being
- 18 distributed in an equitable fashion or a fair
- 19 fashion.
- 20 So I commend you for knowing and
- 21 understanding what the problems are here in the
- 22 west. And we, in turn, don't want to just depend on
- you to take the message back. You need our help, as
- 24 well, as I read it, to get the message to Congress
- 25 and to your fellow commissioners that fair is fair.

- 1 And it's not fair out here in the west right now.
- 2 It's mostly cloudy to gloomy in the distribution of
- 3 those funds.
- 4 SENATOR CASE: You know, I'm not the
- 5 biggest fan of any kind of subsidy program, Mr.
- 6 Commissioner, but when there's one going, I like to
- 7 get my fair share of it. We can't get rid of all of
- 8 them. I don't see why somebody else should get it
- 9 if we can't.
- 10 A point that I think has to come about in
- 11 terms of allocating distribution from the funds is
- 12 the fact that some states have done more than others
- 13 to pay their fair share. We have done -- we've gone
- 14 through an amazing transition in Wyoming. There's
- 15 been a lot of pain and hardship that has created
- 16 the -- Teense is absolutely right about the
- 17 hardships our citizens are going through in paying
- 18 for their bills. But, yet, that ought to count for
- 19 something. I mean, if you're giving federal money
- out between two states, it seems like the state with
- 21 the high -- that's really stepped up to the plate
- 22 and raised local rates in order to encourage
- 23 deployment of technology, encourage competition,
- 24 that ought to count for something. And it's very
- 25 discouraging that it doesn't. And I bet US West

- 1 could talk about that.
- 2 COMMISSIONER NELSON: Commissioner
- 3 Furchtgott-Roth, I have a question. It's
- 4 my understanding --
- 5 COMMISSIONER FURTNEY: Commissioner
- 6 Nelson, just a minute. We have a couple more
- 7 questions down on the other end of the table,
- 8 please.
- 9 REPRESENTATIVE WILLFORD: Yeah. Teense
- 10 Willford here, Commissioner.
- In my hometown, we had a gentleman on a
- 12 kidney machine, couldn't afford to pay his phone
- 13 bill. It got cut off. I intervened, of course,
- 14 with the TAP, the Telephone Assistance Program, got
- 15 him back on. And these things should not be allowed
- 16 to happen. And my question is, as I alluded to
- 17 earlier, we pay for federal -- what is it? --
- 18 federal access charges and taxes and some things.
- 19 Do these funds go into the federal universal fund?
- 20 How does -- how does that mechanism work?
- 21 And, also, as I alluded to earlier, places
- 22 like Puerto Rico get millions of dollars, and we in
- 23 the pioneer west are struggling to get by. And we
- 24 have a lot of folks, as I sent Senator Case 6- or
- 25 700 letters from customers here in Wyoming, who

- 1 absolutely a lot of them were 6-, \$700 a month
- 2 income people who weren't quite eligible for the
- 3 Telephone Assistance Program, still needed these
- 4 basic services for doctors, 911, and one thing or
- 5 another, could not afford to pay those. They came
- 6 to me, Help us. And I don't know how I can. And
- 7 I'm looking for some assistance someplace.
- 8 Thank you.
- 9 MR. CEBALLOS: Commissioner, the one
- 10 piece that I would add to it is I think that even
- 11 when we met two years ago with Chairman Kennard on
- 12 this, he commented on this was the only time in his
- 13 career that he had ever seen -- had experienced the
- 14 governor's office, the Commission, the independent
- 15 telephone companies, US West, Sprint, in that
- 16 particular case that had been there, in unanimous
- 17 support of this. Most recently, the Commission has
- 18 sent to you a document asking for an adoption of a
- 19 model that they have put in place.
- And what I would say is in Wyoming, we have
- 21 dropped access. We've raised basic service. We had
- 22 a \$9 million state fund for universal service. All
- 23 of the federal dollars are going to take that fund
- 24 down as low as we can. Experiment with Wyoming.
- 25 What I hear is we can't afford to do it in Wyoming,

- 1 because we'll have to do it everywhere. Well,
- 2 experiment with us. I think we have stepped up.
- 3 Let's see if we can put a different model in here.
- 4 You're not going to break the bank, I can assure
- 5 you, even if you fully fund it. And see if you
- 6 can't reward states for doing the right things. I
- 7 think you'll direct states, if you have that
- 8 specific policy, in the right direction.
- 9 COMMISSIONER FURTNEY: Commissioner
- 10 Nelson?
- 11 COMMISSIONER NELSON: Thank you.
- 12 Commissioner Furchtgott-Roth, I guess on the
- 13 new program that's going to come out of universal
- 14 service, the increase in the lifeline and linkup
- that's available, one of the problems that we've
- 16 found in South Dakota is we've done a lot, since
- 17 there's been a lot of talk about that lately, to
- 18 make people more aware that they're entitled to
- 19 those benefits. But the problem we see is that
- 20 they -- even though we dump more money in that
- 21 program, these people still are not going to have
- 22 telephone service, because they owe the telephone
- 23 company, the electric company, and gas company so
- 24 much money in back bills that they won't qualify for
- 25 the programs, because they -- until they pay the

- 1 company what they owe them for former services,
- 2 they're not entitled to get back on the program,
- 3 because the utilities aren't handing out free stuff.
- 4 And so do you have any idea what we might do to get
- 5 around that or how we can address it?
- 6 COMMISSIONER FURCHTGOTT-ROTH: Well,
- 7 Commissioner Nelson, I'm here to learn. I can tell
- 8 you what's going on in Washington, but I don't
- 9 have -- there have been a lot of programs that have
- 10 tried to figure out ways to keep people connected.
- 11 For instance, restricted -- making, in essence,
- 12 direct dial long distance unavailable. Because a
- 13 lot of times, the back payments are for long
- 14 distance services. But I'm not -- I don't really
- 15 have the answers for these things. But I'm aware
- 16 that there are a lot of problems in getting to the
- 17 lifeline and linkup programs.
- 18 COMMISSIONER NELSON: See, the real
- 19 problem, I don't think, is really paying for the
- 20 phone. I mean, it's part of the problem. But a
- 21 major part of the problem on the reservation -- and
- 22 that seems to be what we're concentrating on -- is
- 23 more than not being able to pay for your telephone
- 24 bill. It gets down to economic development, jobs,
- 25 and a living wage. And if they had those things,

- 1 then they'd be able to pay for the telephone
- 2 service.
- 3 COMMISSIONER FURTNEY: Commissioner
- 4 Thompson, I believe you have a question for our
- 5 panelists.
- 6 COMMISSIONER THOMPSON: I do.
- 7 I was interested to hear the examples the
- 8 panel provided about demand aggregation --
- 9 aggregation. I'm wondering what some of them might
- 10 think about the role we, as regulators, should play.
- 11 Is facilitating, encouraging, or maybe even
- 12 requiring that sharing some of the existing
- 13 broadband resources amongst other potential users be
- 14 something we, as regulators, should do to ensure
- 15 more wide deployment of broadband in rural areas?
- MR. SCHAIBLE: Well, I think -- to
- 17 address that comment, I think from a competitive
- 18 standpoint, you know, naturally, there are things
- 19 like density that make the business cases work
- 20 better and so on and so forth. But I think as long
- 21 as -- from a competitive environment, as long as
- 22 there's no directive to deploy service outside of a
- 23 certain density, if you will, or a certain
- 24 concentration -- if there's no directive, I think
- 25 we're all right. I think as soon as -- as soon

- 1 as -- I'm speaking for our particular business case.
- 2 But as soon as we're directed to go out, I know that
- 3 we've got a lot of the specific nodes that are not
- 4 cost-effective. And our business model is, you
- 5 know, pretty slim in some of the rural areas. So as
- 6 long as we are not directed to go outside of that
- 7 particular cluster, if you will. If we have to go
- 8 outside of that to a really long haul to serve one
- 9 customer, we need some support to make that work.
- 10 Otherwise, it doesn't work from a competitive
- 11 standpoint.
- 12 MR. CEBALLOS: I would add one
- 13 additional thing. I think additional directives or
- 14 regulation -- I don't think will certainly incent us
- 15 to do more. I think possibly rewarding the types of
- things that we have been able to do might be a
- 17 better way to go about that. It would have the same
- 18 direction. Again, thinking back to the work that
- 19 we've done with Range Telephone, in essence, we're
- 20 going to take the whole northeastern part of the
- 21 state and provide them with broadband based on
- 22 something that was unheard of in the past. And I
- 23 think some recognition and support of that will go a
- lot farther than new directive or regulations.
- MR. DOBRAS: I would have to agree that

- 1 directives are not the solution. We're going back
- 2 to the point I was making earlier about educating
- 3 customers on how to use those tools and teaching
- 4 them the benefits of having those tools available, I
- 5 think is the better solution. But there will still
- 6 be situations that are just not economic.
- 7 COMMISSIONER FURTNEY: Representative
- 8 Willford?
- 9 REPRESENTATIVE WILLFORD: Steve, real,
- 10 real quickly.
- 11 For those of us who unfortunately cannot
- 12 have any competition, we sure didn't have any
- 13 problem with a benevolent monopoly that we used to
- 14 enjoy.
- 15 COMMISSIONER FURTNEY: Well, I think
- 16 we're close to our scheduled break time unless
- there's another really pressing question to be
- 18 asked. Does anyone have one?
- 19 Okay. At this time, I'd like to thank our
- 20 panelists and our questioners for this first part of
- 21 our morning program.
- Thank you.
- 23 (Applause.)
- 24 (At 10:27 a.m., a break was taken
- 25 until 10:51 a.m.)

- 1 COMMISSIONER FURTNEY: At this time,
- 2 I'd like to take just a brief moment to recognize a
- 3 few of the Wyoming state legislators that I know are
- 4 in attendance today.
- 5 I believe Senator John Haynes is here.
- 6 SENATOR HAYNES: Right here.
- 7 COMMISSIONER FURTNEY: Right here.
- 8 Senator, thanks for joining us.
- 9 SENATOR HAYNES: Thank you.
- 10 COMMISSIONER FURTNEY: Representative
- 11 Bruce Burns. Is Representative Burns here today? I
- 12 think I heard that he was here.
- SENATOR HAYNES: Yeah, he's here.
- 14 COMMISSIONER FURTNEY: And Senator Curt
- 15 Meier.
- Well, we appreciate their attendance today
- in our program.
- 18 We're ready to start our second panel at
- 19 this time, "Contrasts in the Deployment of Advanced
- 20 Services." And once again, I'll just give very
- 21 brief introductions to our panelists. And I'll look
- 22 this time.
- 23 I'd like to make one more note. Frank
- 24 Galeotos with the Wyoming Department of
- 25 Administration and Information is here to ask

- 1 questions on behalf of Governor Geringer.
- We have Earl Owens, who is the chief
- 3 executive officer of Blackfoot Telephone Cooperative
- 4 in Missoula, Montana. And he is also currently
- 5 president of the National Telephone Cooperative
- 6 Association.
- We have Ron McCue, who is the assistant vice
- 8 president for Silver Star Communications.
- 9 Gordon Dye -- oops. I've got -- here I am
- 10 looking at my sheet instead of the people at the
- 11 table.
- 12 Let me back up. Seated next to Earl is
- 13 Gordon Dye, vice president and general manager of RT
- 14 Communications and currently president of the
- 15 Wyoming Telecommunications Association.
- Next to Gordon, we have Larry Thompson, a
- 17 senior engineer for Martin & Associates.
- Now we have Ron McCue, assistant vice
- 19 president for Silver Star Communications.
- 20 And next to me, Randy Lowe, general manager
- 21 for the Tri-County Telephone Association and
- 22 president of TCT West and Tri-Tel.
- 23 Please join me in welcoming our second group
- 24 of panelists.
- 25 (Applause.)

1 COMMISSIONER FURTNEY: Earl, why don't

- 2 you go ahead and lead off with your five-minute
- 3 presentation.
- 4 MR. OWENS: Thank you, Steve.
- 5 I'm glad to be here. I welcome the
- 6 opportunity to share the perspective of the rural
- 7 companies that I'm affiliated with.
- 8 As Steve said, I'm the president of the
- 9 National Telephone Cooperative Association. For
- 10 those of you who don't know NTCA or are not familiar
- 11 with it, it's a national association of currently
- 12 527 rural telephone companies -- companies in 46
- 13 states. In spite of the name, over half of the
- 14 members of the association are commercial companies,
- 15 the balance being cooperatives.
- In September of last year, NTCA conducted a
- 17 survey of its members. And 412 of the companies
- 18 responded. The survey examined the availability of
- 19 Internet access and the deployment of broadband
- 20 capable facilities for high speed Internet access.
- 21 Of the respondents, 97 percent of the companies
- 22 offer Internet access. And they do that with a
- 23 variety of different technologies, generally
- 24 dial-up. But 30 percent of the companies offer
- 25 ISDN, 40 percent of the companies offer fractional

- 1 T1. And then 121 of the respondents, or about 30
- 2 percent, also stated that they are either
- 3 offering -- and this was last September -- that they
- 4 are either offering or planning to offer DSL service
- 5 in their territories.
- 6 I'd like to give just a brief overview of
- 7 four different companies that are -- that are
- 8 offering broadband services, four different NTCA
- 9 members. The first is Grand River Mutual of
- 10 Princeton, Missouri. Grand River Mutual researched
- 11 and tested a number of high speed Internet access
- 12 products before they settled on the vendor that they
- 13 have chosen. In the first six weeks after
- 14 introducing their -- their DSL product, they
- 15 converted 21 percent of their dial-up customers to
- 16 the new DSL product -- the new DSL service, rather.
- 17 The second company I'd like to mention is
- 18 Central Texas Telephone Cooperative of Goldthwaite,
- 19 Texas. Central Texas has begun billing for
- 20 broadband service to seven business customers in San
- 21 Angelo, Texas, a population of about 103,000, using
- 22 LMDS, or local multipoint distribution service.
- 23 Central Texas, which acquired three A block licenses
- 24 in the FCC's LMDS 1998 auction, is among the first
- 25 carriers in the United States, urban or rural, to

- 1 deploy LMDS.
- 2 Central Texas is operating the San Angelo
- 3 service as a competitive local exchange carrier and
- 4 intends to do the same in the nearby town of
- 5 Goldthwaite, where they're headquartered, where
- 6 three hub sites have been identified. And although
- 7 the cooperative is headquartered in Goldthwaite, its
- 8 ILEC service areas are outside the town, covering
- 9 the more remote areas. Central Texas eventually
- 10 plans to provide broadband service to these areas
- 11 using either LMDS or MMDS, multichannel multipoint
- 12 distribution service.
- The third company I'd like to just mention
- is Nemont Telephone Cooperative of Scobey, Montana.
- 15 You've already heard their name mentioned this
- 16 morning in the telemedicine project. Nemont began
- 17 deploying ADSL early this year in its 13,768 square
- 18 mile service area. The telco serves 48 local
- 19 exchanges in northeastern and southeastern Montana.
- 20 Included in this territory are the Fort Peck Indian
- 21 Reservation and the Crow Indian Reservation.
- 22 Subscriber density is 1.36 subscribers per square
- 23 mile. One ADSL site, in the town of Glasgow, was
- 24 operational in February, and the telco expects to
- 25 have ADSL access available to 47 percent of its

- 1 subscribers by midsummer this year. According to
- 2 Ron Osburg, who oversees Nemont's business
- 3 development and government relations, ADSL is the
- 4 best workable solution in the telco's territory at
- 5 present. And he expects the reach of the technology
- 6 to increase over time.
- 7 The fourth company I'd like to talk to you
- 8 about is my own, Blackfoot Telephone Cooperative,
- 9 and our commercial company subsidiary, Blackfoot
- 10 CFT. We have -- we have currently selected an
- 11 ADSL vendor, and we will begin deployment in August
- 12 of this year. And by the end of this year, over 40
- 13 percent of our access lines will have access to
- 14 ADSL, and virtually 100 percent by the -- by the
- 15 middle of next year, July of 2001. I say virtually,
- 16 because we have two small exchanges. The two
- 17 combined are about 150 lines that we are not going
- to be able to provide access to because of their
- 19 remoteness and because of the -- the transport
- 20 facilities that we use to connect to them with.
- The one minute sign has just come up.
- I suspect there are a lot of companies who
- 23 have not deployed ADSL to this point even though it
- 24 has been available, for a number of reasons. I
- 25 think one of the basic reasons is we've been waiting

- 1 for a standard to be developed and deployed so that
- 2 we could gain the economies of the cost. The second
- 3 is our vendor does not have or just recently made
- 4 the product available, the standard based product
- 5 available.
- And as I described, with this new standard
- 7 based product available, deployment will begin. And
- 8 we anticipate -- well, our plan is that by the end
- 9 of this year, by the end of 2000, only 4 percent of
- 10 our loops will be loaded loops. So the other 96
- 11 percent will have access to DSL services. And
- 12 that's 17- -- 17,000 lines spread over 7,500 square
- 13 miles in very mountainous, rugged terrain in western
- 14 Montana.
- 15 Thank you.
- 16 COMMISSIONER FURTNEY: Thank you, Earl.
- 17 Gordon?
- MR. DYE: As stated before, my name is
- 19 Gordon Dye. I'm the general manager of
- 20 RT Communications, Incorporated, an independent
- 21 telephone company in the state of Wyoming that has
- 22 been in existence since 1994. I am also the
- 23 president of the Wyoming Telephone Association for
- 24 this year. And in these capacities, I have gained
- 25 an appreciation for the difficulty in providing

- 1 advanced telecommunications services in a rural
- 2 state such as Wyoming. In fact, providing plain old
- 3 telephone service in Wyoming presents some unique
- 4 problems, let alone providing broadband services.
- 5 As we know, Wyoming is a very rural state.
- 6 Most states have a single city with a greater
- 7 population than our whole state. RT Communications,
- 8 for instance, presently has less than four access
- 9 lines per route mile. Compounding this problem is
- 10 the terrain in our state, which also makes it
- 11 difficult and costly to serve. Nevertheless, the
- 12 rural independent telephone providers have made
- 13 every effort to provide state of the art quality
- 14 service to the residents of this state. In fact,
- over the course of the last ten years, the
- 16 independents have converted our -- our analog
- 17 switches to digital technology, installed hundreds
- 18 of miles of fiber optic line and state of the art
- 19 digital loop carrier systems. The independents have
- 20 also led the way in providing analog and digital
- 21 wireless technology. This has been an expensive
- 22 process, and the FCC needs to know how costly it is
- 23 to serve portions of Wyoming.
- I would like to provide you an example which
- 25 typifies how costly it can be to serve certain rural

- 1 areas. Jeffrey City, a small community in south
- 2 central Wyoming, which is 60 miles from the nearest
- 3 community, was home to approximately 15- to 2,000
- 4 residents during the uranium boom. Given the bust
- 5 in the uranium market, RT is left with 133 access
- 6 lines in this small community. Because of
- 7 antiquated equipment, both microwave and central
- 8 office, RT had to upgrade the community. We have
- 9 installed both digital microwave and buried fiber
- 10 cable to serve Jeffrey City. We have also installed
- 11 a new technology host remote digital switching
- 12 system. The project equates to about \$900,000.
- 13 This provides digital switching but is not -- but
- 14 does not provide broadband to the last mile. To
- 15 provide broadband services of 200 kilobits or better
- 16 to these 133 access lines will cost another
- 17 \$875,000.
- We spent a total of 170- -- or \$1.78 million
- 19 on Jeffrey City. This is a per customer investment
- 20 of over \$13,000. An average customer bill would be
- 21 approximately \$335 per month. Remember, I said this
- 22 is average. So customers in town may pay \$100 per
- 23 month, and those out of town could see bills as
- large as \$1,000 or more per month. These expenses
- 25 are not unusual.

RT has other areas in Wyoming. F	reas in Wyoming. For	in	areas	other	has	RT	1
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- 2 instance, Rocky Point in far northern Wyoming, which
- 3 has only 27 customers. The monthly bill to provide
- 4 advanced broadband services would be approximately
- 5 \$1,100 a month. These outlays are necessary in
- 6 order to provide telecommunications services that
- 7 are in any way equivalent to more urban areas.
- 8 There are other issues. We hear a lot about
- 9 the last mile. Well, the last mile is not the only
- 10 problem in Wyoming. Parts of Wyoming depend on
- 11 microwave systems that are at capacity. If we had
- 12 broadband services from our central office to each
- of our customers in northeast Wyoming, it would do
- 14 them no good, because the microwave backbone is
- 15 full. However, we are working to address this
- 16 problem.
- 17 RT Communications and a sister company,
- 18 Advanced Communications Technology, and our parent
- 19 company, Range Telephone Cooperative, are working
- 20 together to build a fiber optic system for north
- 21 central Wyoming. Our companies will install a fiber
- 22 cable from Casper to Sheridan, approximately 200
- 23 miles. US West will complete a fiber route south
- 24 and east of Gillette. RT and Range will meet US
- 25 West east of our Midwest exchange and west of our

- 1 Moorcroft exchange. When complete, the northeast
- 2 quarter of Wyoming will be fiber fed, and it will
- 3 therefore be possible to deploy broadband services
- 4 to communities such as Newcastle, Sundance, Hulett,
- 5 Gillette, Sheridan, Kaycee, Midwest, and Buffalo.
- 6 But this project is expensive. Right-of-way is
- 7 getting hard to obtain. And when the project is
- 8 complete, we will be faced with competition for the
- 9 customers that we need and for which we are trying
- 10 to improve services.
- When you think about the cost to upgrade the
- 12 last mile and our backbone infrastructure, you can
- 13 easily appreciate the risks that our members face in
- 14 constructing this system. There is no guarantee
- 15 that we will get a return on our investment. We
- 16 need to ensure that existing revenue streams remain
- 17 intact. Nevertheless, there are still areas that
- 18 cannot support enhanced services at this time.
- 19 These pockets of 27 customers here and another 133
- 20 customers way out there might have to wait until we
- 21 have a less expensive technology.
- Thank you.
- 23 COMMISSIONER FURTNEY: Thank you,
- 24 Gordon.
- 25 Larry?

1	MR. THOMPSON: I'm Larry Thompson. I
2	work with Martin & Associates. We do the
3	engineering and consulting work for a couple hundred
4	small, independent telephone companies, primarily in
5	the region that we're talking about. From Idaho to
6	Ohio is primarily where we do our work.
7	So we've by doing the engineering and
8	cost consulting for these telephone companies, we've
9	seen firsthand, you know, what the challenges are
10	for deploying broadband in the rural areas. And
11	they've actually had a reasonable amount of success
12	deploying it. This morning we actually heard some
13	success stories, as well, typically centered around
14	upgrading broadband, you know, backbone. It might
15	have been CLEC'ing, competitive local exchange
16	carriers going in. Typically, those kinds of things
17	don't need as much help as what I want to talk to
18	you about, which is really the last mile, the local
19	loop.
20	It's getting from the electronics, that last
21	electronics between the customer and the central
22	office. It's that last copper and fiber loop that's
23	required to be able to deliver the broadband. In
2 4	South Dakota, Montana, Wyoming, a lot of states
25	we're talking about today, the last mile isn't the

- 1 last mile; it's the last 50 miles. And in that
- 2 respect, we're a lot more -- a lot like a telephone
- 3 company. We need a little copper in our diet, but
- 4 we need a whole lot more fiber. What we need to be
- 5 able to do is push that electronics closer to the
- 6 consumer.
- We've done some studies for the state of
- 8 South Dakota, for example, where we actually had
- 9 legislation in our state a couple of years ago --
- 10 we're based in Mitchell, South Dakota. But we've
- 11 had some legislation the last couple of years where
- 12 we were in the legislation that the telephone
- 13 companies were required to be able to provide those
- 14 types of services to the consumers. We did a study
- 15 just in the independent territories, you know,
- 16 everywhere except for the RBOC, which is US West in
- 17 South Dakota, obviously. And for the 135,000 access
- 18 lines or so in the independent territories, the cost
- 19 to be able to upgrade South Dakota for broadband --
- 20 for broadband infrastructure was a little over
- 21 \$500 million. Of that, approximately 70 percent of
- 22 that was local loop investment, the stuff that you
- 23 bury in the ground. You know, it's the fiber and
- 24 copper cables required to be able to get the
- 25 broadband, to shorten up those loop lengths.

- 2 you have had the opportunity to see the NECA
- 3 broadband task force study -- which I'm a member of
- 4 that task force, as well -- that just came out on
- 5 Wednesday, two days ago. But they did a similar
- 6 study as part of the task force where they took a
- 7 look at how much it would cost to upgrade the local
- 8 loop for the NECA carrier common line pool members.
- 9 So it's just a subset of the rural subscribers,
- 10 actually. And what they determined -- they threw
- out, first of all, everybody who was planning on
- 12 upgrading by 2002 and only dealt with the ones that
- were beyond the 2002 time frame. They came up with
- 14 a number of \$10.9 billion nationwide required to
- 15 upgrade those facilities for broadband access.
- 16 So it's really not so much, I don't feel,
- 17 that 65 percent of the population or so that's
- 18 living in the town, where we just have to typically
- 19 put in some electronics -- there's exceptions,
- 20 obviously, to these rules -- but put in some
- 21 electronics to serve them. It's the 35 percent that
- 22 lives outside those towns, in these rural areas,
- 23 that we really need to be focused on.
- In fact, one of our clients in Montana has
- 25 an exchange that's 2,200 square miles, has 641

- 1 subscribers. 2,200 square miles, by the way, is
- 2 twice the size of Rhode Island. That's 641
- 3 subscribers. To be able to upgrade that exchange
- 4 was going to cost around \$22,000 per access line to
- 5 be able to give those consumers broadband access.
- 6 Those kind of numbers, it's pretty hard to
- 7 economically justify. That exchange, by the way, is
- 8 less than .2 subscribers per square mile. It takes
- 9 more than five square miles to get one subscriber in
- 10 some of those exchanges. That's rural.
- I think there are instances where there is a
- 12 considerable amount of success. I believe that the
- 13 small rural telcos are being very aggressive in
- 14 trying to deploy this; that we have seen some good
- 15 examples of that. But the bottom line is there's
- just a lot of areas that it's just not economically
- 17 feasible for these guys to be able to do it.
- 18 They're going to need some help. In states like
- 19 we're talking about with half a million to a million
- 20 residents in the entire state, it's also pretty
- 21 tough to do that on the state level. I think that
- 22 they need something, some help from the federal
- 23 level to be able to effectively deploy that.
- We've seen cost averaging work in a lot of
- our areas, not only in the telephone industry to

- 1 deploy basic telephone service but also the postal
- 2 industries. You know, it costs the same to mail a
- 3 first class letter from, you know, Los Angeles to
- 4 New York as it does from Los Angeles to Pukwana,
- 5 South Dakota, or Circle, Montana, wherever it might
- 6 be. They use cost averaging, as well.
- 7 I think we need to be able to look and
- 8 realize that it still is a public network. We need
- 9 to change our definition of what our network is.
- 10 POTS isn't where our network is going. And we need
- 11 to expand our definition of what, you know,
- 12 universal services should cover to be able to
- 13 effectively do it.
- We have legislation on the books that says
- 15 that we should have it reasonable and affordable in
- 16 all areas of the country. And it's also that it
- 17 needs to be done in a timely manner. So that's not
- 18 the issue anymore. I think the real issue is if we
- 19 want it to be reasonable and affordable and done in
- 20 a timely manner, how do we effectively do that? And
- 21 with the kind of numbers that we see now as far as
- 22 being able to deploy it in a lot of our areas, it's
- 23 going to be a difficult, difficult challenge.
- 24 Thank you.
- 25 COMMISSIONER FURTNEY: Thank you,

- 1 Larry.
- 2 Ron?
- 3 MR. McCUE: Good morning. If you look
- 4 at your program, it indicates that Alan Hoops is
- 5 supposed to be here. I'm the -- I'm the pinch
- 6 hitter this morning due to an illness in the family.
- 7 As the commissioner said, my name is Ron
- 8 McCue. I'm the vice president for Silver Star
- 9 Communications and Teton Communications, a local
- 10 exchange carrier operating in rural western Wyoming
- 11 and eastern Idaho.
- 12 If I were to use the term "urban versus
- 13 rural" and ask you to conjure up images of each in
- 14 your mind, I would probably submit that there's
- 15 almost as many different definitions in this room as
- 16 there are people. And as the governor indicated,
- 17 rural, in a lot of cases, doesn't quite fit Wyoming,
- 18 because we have frontier areas.
- 19 Telecommunications has been a backbone to
- 20 this state for many years. The distance and density
- 21 issue, for us, is nothing new. The rural ILECs that
- 22 you see represented here at the table and yet in
- 23 this room have always attempted to be at the
- 24 forefront of technological deployment in our local
- 25 areas. This hasn't changed. The tremendous growth

- 1 of the Internet, the way it's changed the way we
- 2 fundamentally do business not only in Wyoming but
- 3 globally, and how it has impacted rural economic
- 4 development, particularly in Wyoming, is extremely
- 5 important. I think Silver Star and what it
- 6 represents as -- in contrast to this morning's
- 7 panel, contrasting the deployment of advanced
- 8 services, is highly representative.
- 9 By July of this year, we're very proud to
- 10 say that 100 percent of our customers in Wyoming
- 11 will have DSL services available to them. Yet, in
- 12 contrast to that, in our Idaho exchanges, we have
- one exchange that has the density of .4 customers
- 14 per route mile. It takes a long ways to go to serve
- 15 those folks over there. You can stand at the
- 16 central office and count on one hand the number of
- 17 customers you can see from the center of our
- 18 population base. That community is not going to get
- 19 DSL real soon. Absent some external support
- 20 mechanisms, those folks will not join the broadband
- 21 revolution, and the digital divide will be very real
- 22 for them.
- We have done field trials for three
- 24 different varieties of -- of DSL type services
- 25 beginning midsummer last year. And, Vic, in

- 1 Wyoming, I'm sorry to say -- well, I'm proud to say
- 2 we have more demand for DSL services than we can
- 3 keep up with due to supplier demand. Our businesses
- 4 are finding ways to use it and are finding creative
- 5 and unique ways of deploying DSL in their business
- 6 application, both locally and globally, to improve
- 7 their business and economic futures.
- 8 There are a number of things that can be
- 9 done in truly rural and frontier areas like our
- 10 Wayan (phonetic) exchange. We can change
- 11 depreciation rates. The old idea of life is 20
- 12 years isn't going to work in today's technology. We
- 13 have a DSL product that we put in place in April of
- 14 last year. It is technologically obsolete and will
- need to be replaced before the year 2000 is over
- 16 with. I would submit to you 20 years is not an
- 17 appropriate depreciation cycle for that product. In
- 18 addition, universal service funds or the removal of
- 19 the cap for universal service funds for those
- 20 rural -- truly rural exchanges are going to be
- 21 necessary.
- 22 Do I believe that DSL services in our highly
- 23 concentrated high density Wyoming exchanges are
- 24 necessary? No, I don't, as evidenced by our
- 25 deployment already. Do I believe that federal or

- 1 state changes are going to be necessary for the
- 2 truly rural exchanges? I believe they absolutely
- 3 will. Our area needs a tremendous amount of help.
- 4 Rural economic development for Silver Star not only
- 5 is the support of a quality voice network but a
- 6 quality broadband network that our community can
- 7 hold up as an attractant to businesses and a
- 8 retention tool for the businesses that we have. For
- 9 that reason alone, we have seen it necessary to
- 10 deploy broadband in our areas.
- 11 Thank you.
- 12 COMMISSIONER FURTNEY: Thank you, Ron.
- 13 Randy?
- 14 MR. LOWE: Good morning. My name is
- 15 Randy Lowe, and I'm with Tri-County, TCT, Tri-Tel.
- 16 And I'm also the president of Yellowstone Cellular,
- 17 Inc., which is a Vorizon provider in Big Horn Basin
- 18 and Yellowstone Park. And we are a 51 percent owner
- 19 of that license. And I'm proud to say that we now
- 20 have the new satellite phone. It works great, but,
- 21 unfortunately, there's a gray cloud surrounding that
- 22 silver lining. It has no fax, data, 911. So
- 23 technology is still lagging, but there is a place
- 24 for some of those -- some of those phones in rural
- 25 Wyoming.

1 Even though we sell cellular, I certainly

- 2 hope that people don't throw away their wireline
- 3 phone to get a service that's not as good as the
- 4 step switch network that we had in place in 1994
- 5 when we bought out some of the US West exchanges.
- 6 At least that guy would run 28.8 modems. So even
- 7 though we sell it, it, to us, is a convenience tool.
- 8 I mean, we all have them. They're great for what
- 9 they're for, but they're not a broadband animal.
- 10 Because of Father Time, I think I'll just
- 11 try to explain some of my comments in my little
- 12 piece here. Our network is designed a little
- 13 differently than -- you know, being last on program,
- 14 I get to hear everybody else's story. I think our
- 15 network is somewhat different than everybody's so
- 16 far in that when we started out with a lot of square
- 17 miles -- and I don't know how many, but it's --
- 18 we're bordered on the mountains of the Big Horn
- 19 Basin on the west, the south, and the east and by
- 20 Rimrock Mall on the north in Billings.
- We had to figure out some way to serve all
- 22 of those people. And we couldn't afford seven
- 23 central offices like were in place when we bought
- 24 the companies to add to our existing company. So we
- 25 decided to plow fiber in a ring through all of those